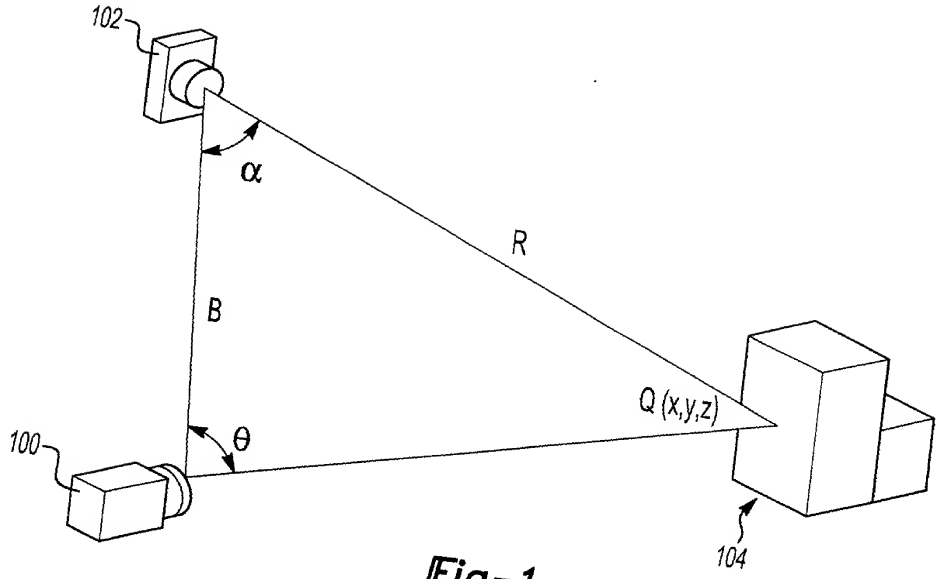


Fig-1

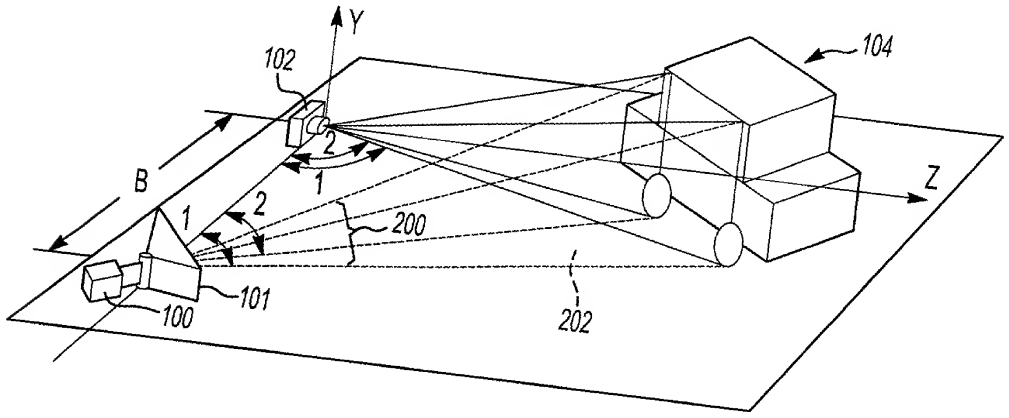


Fig-2

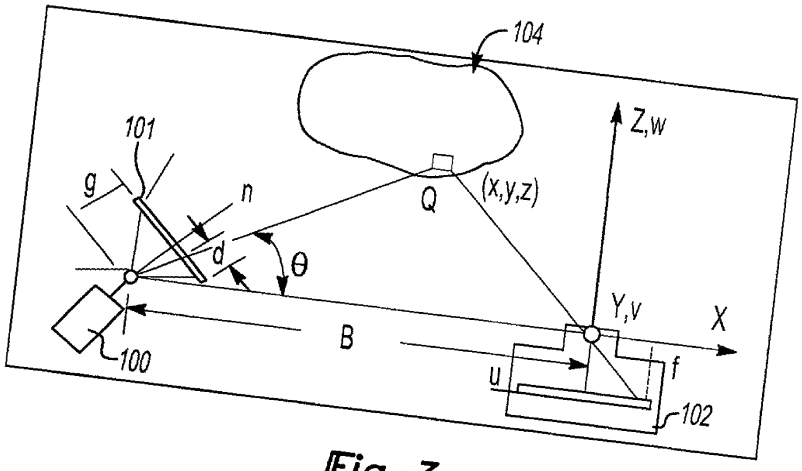


Fig-3

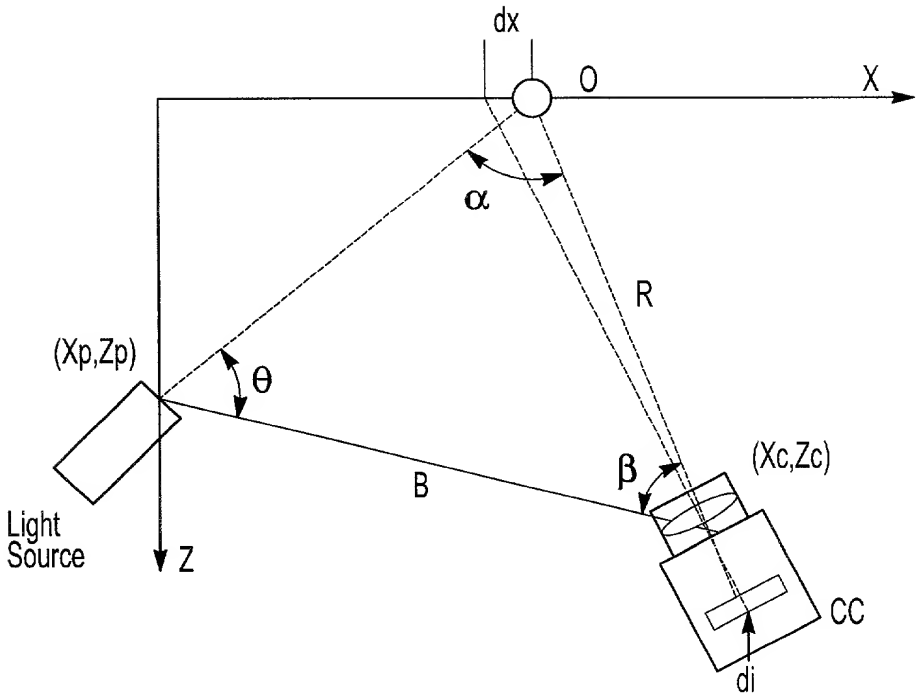


Fig-4

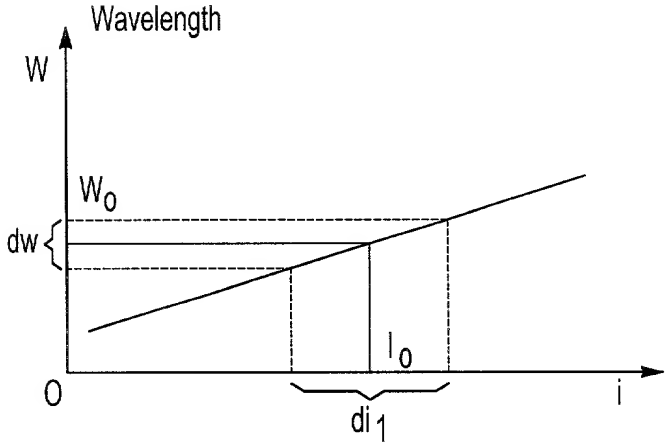


Fig-5A

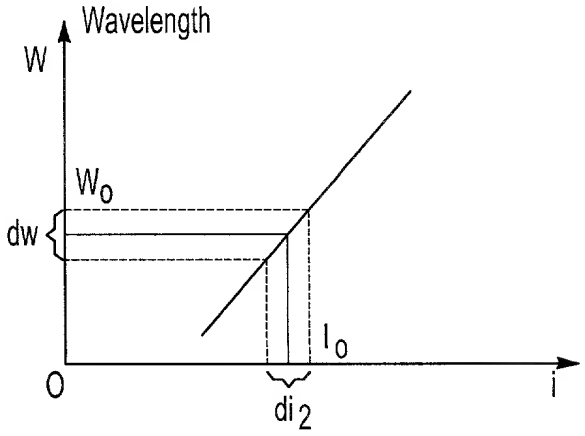


Fig-5B

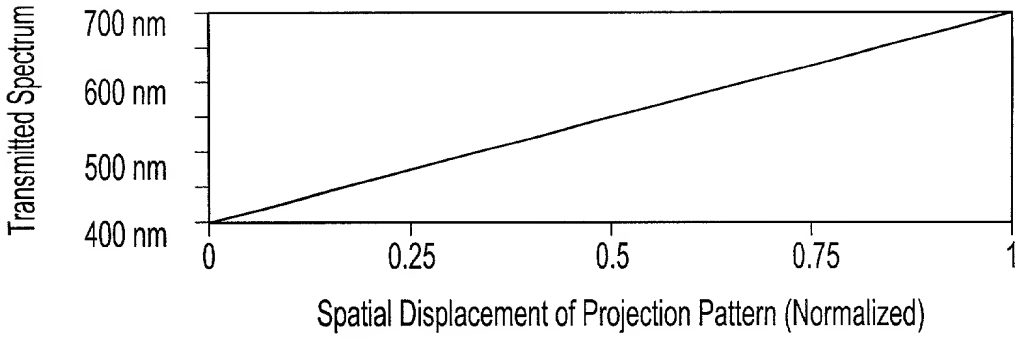


Fig-6A

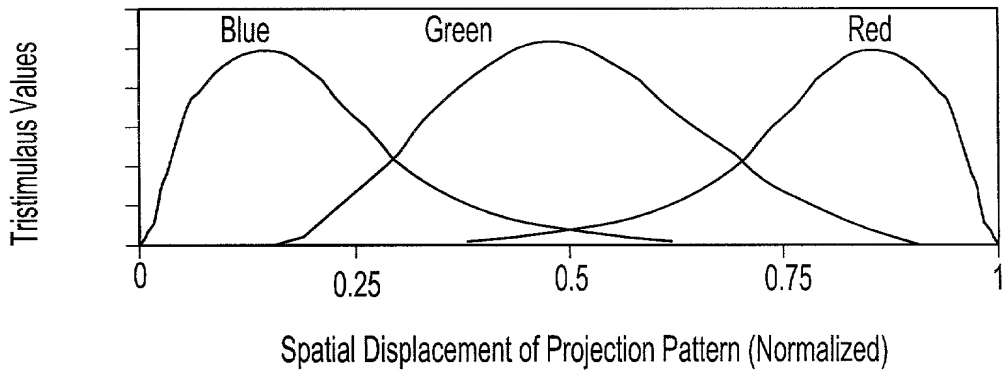


Fig-6B

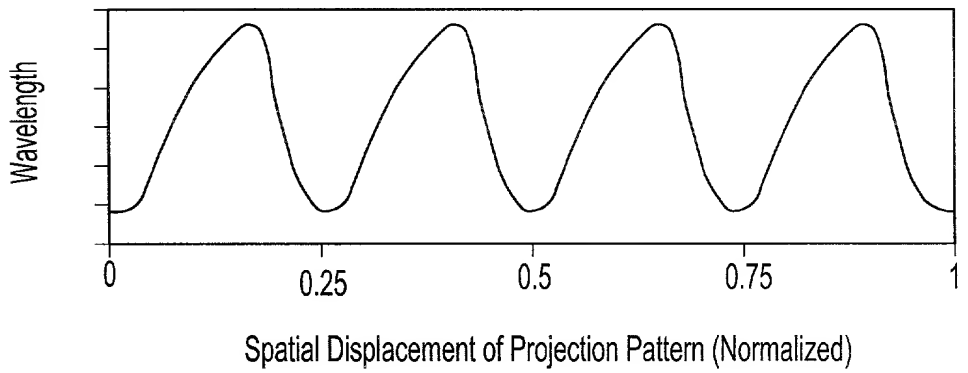


Fig-7A

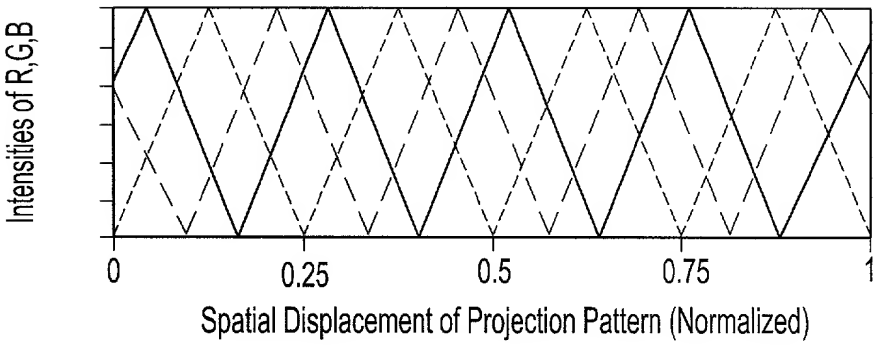
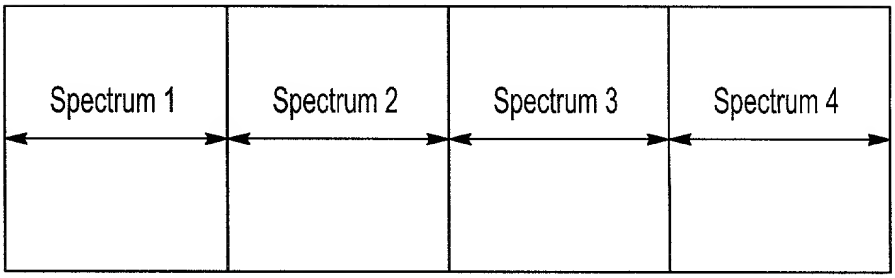
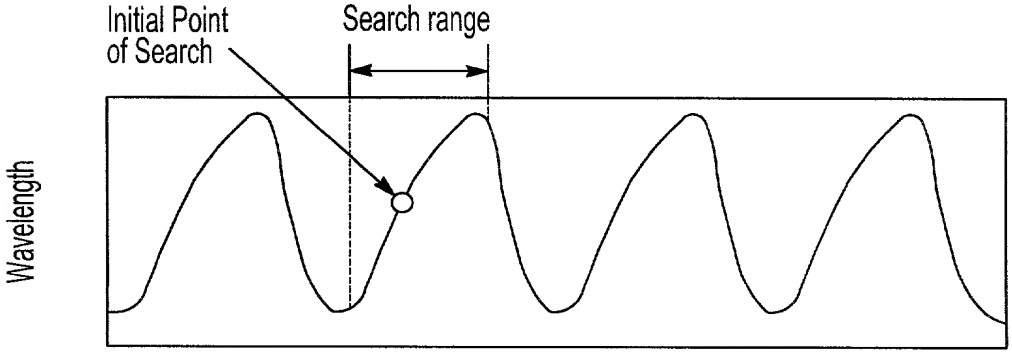


Fig-7B



Multi-Rainbow Projection Pattern

Fig-7C



Projection Angle v.s. Wavelength

Fig-8

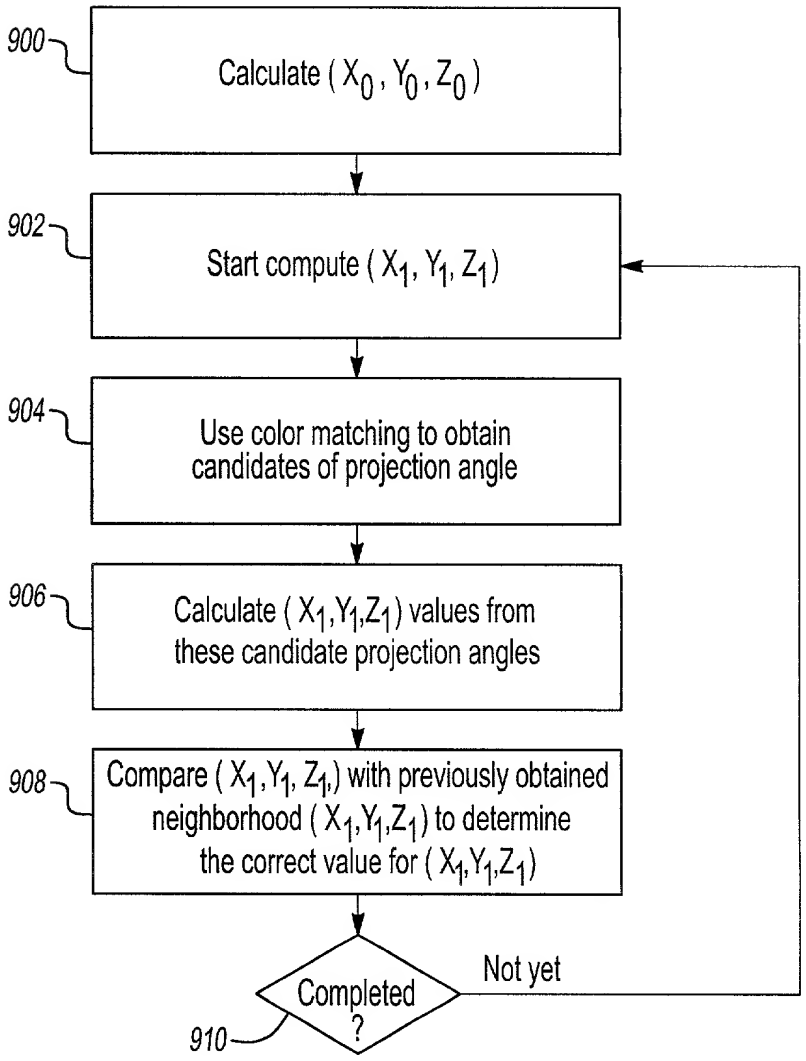

900
Calculate (X_0 , Y_0 , Z_0)
902
Start compute (X_1, Y_1, Z_1)
904
Use color matching to obtain candidates of projection angle
906
Calculate (X_1,Y_1,Z_1) values from these candidate projection angles
908
Compare (X_1,Y_1, Z_1,) with previously obtained neighborhood (X_1,Y_1,Z_1) to determine the correct value for (X_1,Y_1,Z_1)
Completed ?
Not yet
910

Fig-9

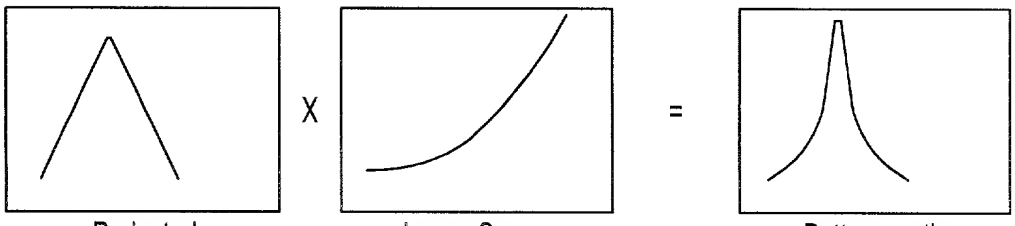

X
=
Projected Illumination Pattern
Image Sensor Characteristics
Pattern on the Received Image

Fig-10A

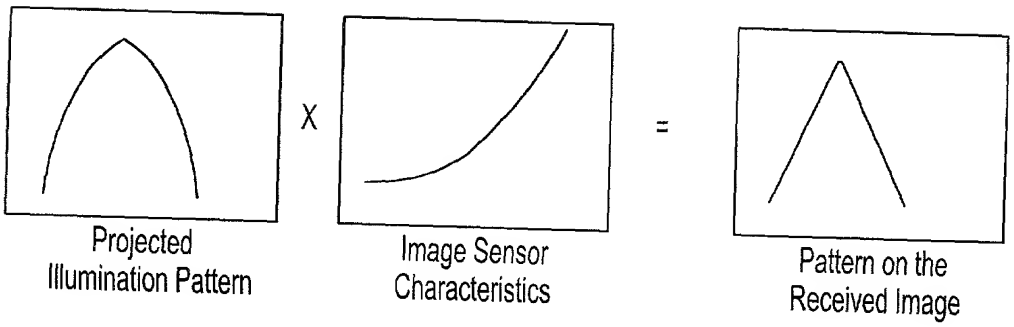


Fig-10B

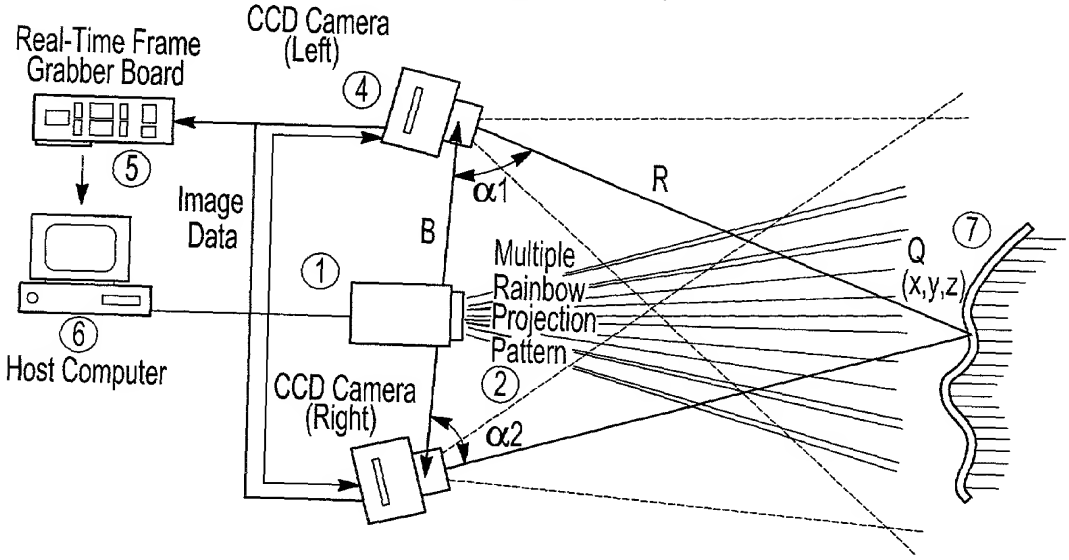


Fig-11

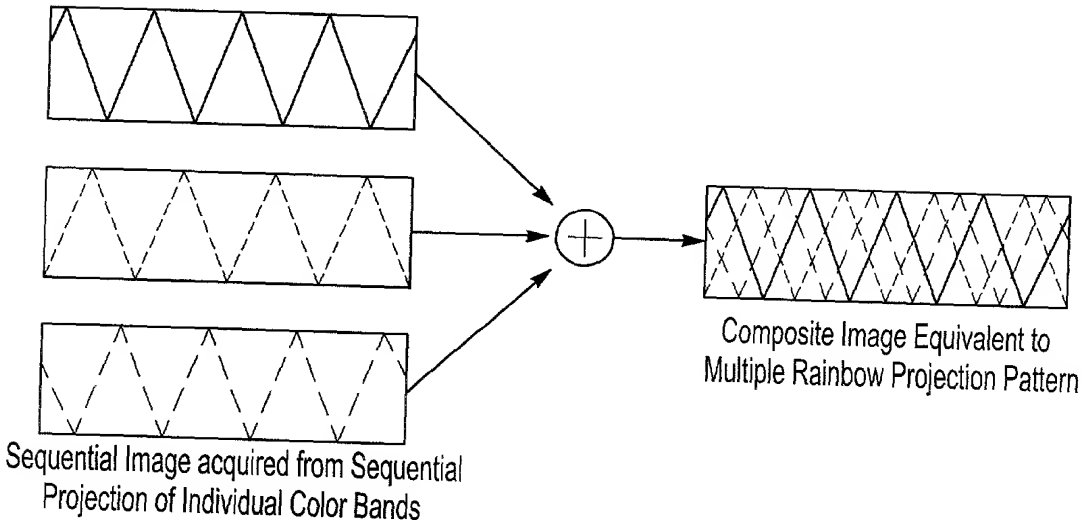


Fig-12A

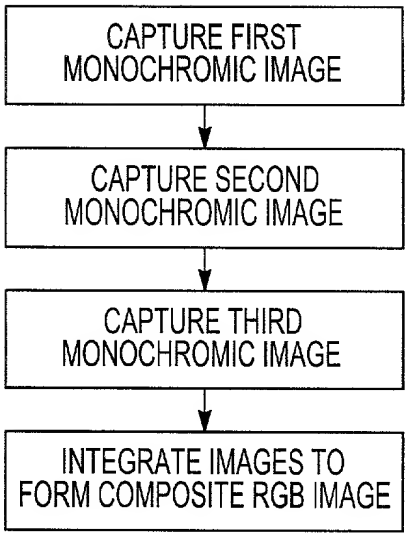


Fig-12B

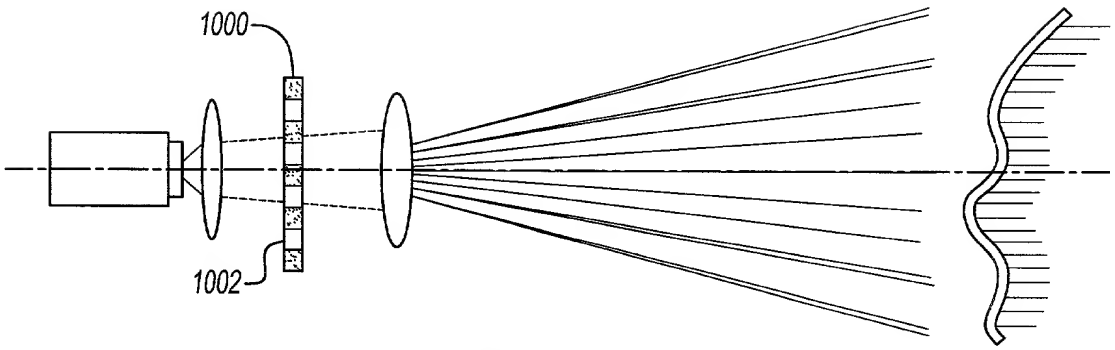


Fig-13

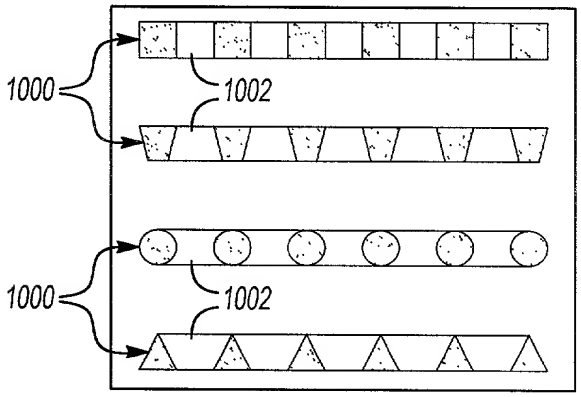


Fig-14

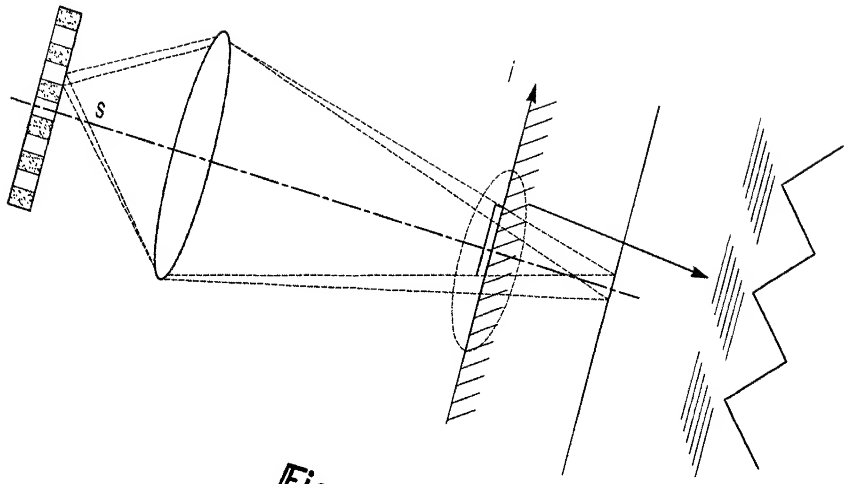


Fig-15

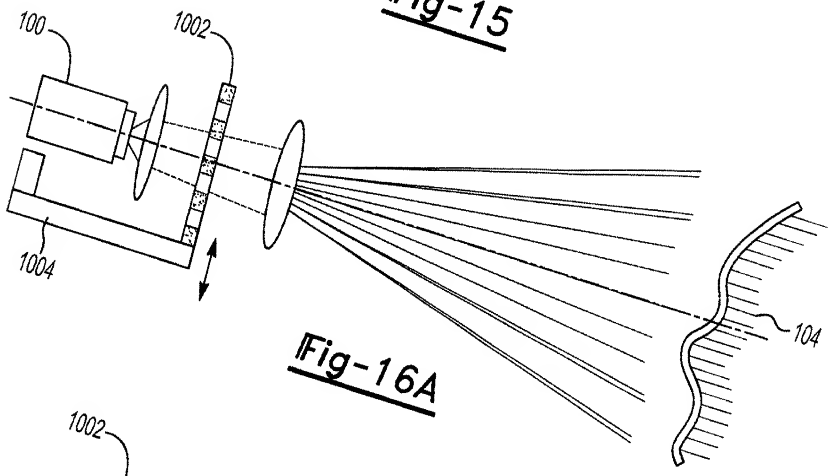


Fig-16A

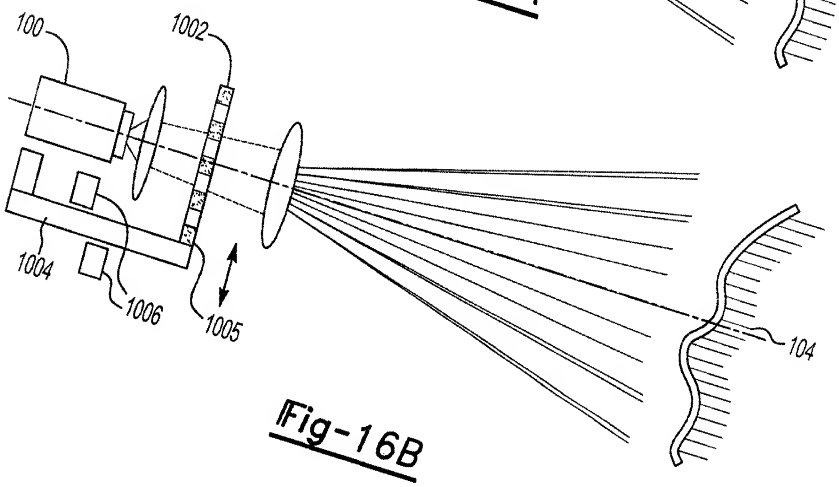


Fig-16B